



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

SUREBEAM CORPORATION

Serial No. 09/912,576

Filed: July 24, 2001

For: **FIXTURES FOR PROVIDING AN  
IRRADIATION WITHIN  
ACCEPTABLE LIMITS**

Date: November 13, 2002

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on November 13, 2002.

Ellsworth R. Roston  
Ellsworth R. Roston, Reg. No. 16,310

[256464.1]

1744  
#2  
B/H  
11/23/02  
RECEIVED  
NOV 20 2002  
TC 1700

**COMMUNICATION TO THE PATENT OFFICE**

Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

The following prior art references have been cited by the Examiner in the PCT application PCT/US02/23545 (our docket No. SUREB-61806) corresponding to U.S. application serial No. 09/912,576 (our docket No. SUREB-57333).

DATABASE WPI  
Section Ch, Week 200114  
Derwent Publications Ltd., London, GB;  
Class-K08, An 2001-127961  
XP002209102  
& JP 2000 312708 A (NKK Plant Kensetsu KK)  
14 November 2000 (2000-11-14)  
abstract; figures 4, 6

Relevant to Claim No. 1-52

US 5 396 074 a (Peck Richard O et al.)  
7 March 1995 (1995-03-07)  
cited in the application  
column 1, line 13 - column 1, line 18  
column 4, line 52 - column 6, line 37;  
figures 1, 2

Relevant to Claim No. 1-52

SERIAL NO.	ISSUED	TITLE	INVENTOR
5,396,074	3/7/95	IRRADIATION SYSTEM UTILIZING CONVEYOR- TRANSPORTED ARTICLE CARRIERS	PECK, et al.
WO 00/68955	11/16/00	ARTICLE IRRADIATION SYSTEM HAVING INTERMEDIATE WALL OF RADIATION SHIELDING MATERIAL WITHIN LOOP OF A CONVEYOR SYSTEM THAT TRANSPORTS THE ARTICLES	WILLIAMS, et al.
WO 99/67793	12/29/99	ARTICLE IRRADIATION SYSTEM HAVING INTERMEDIATE WALL OF RADIATION SHIELDING MATERIAL WITHIN LOOP OF A CONVEYOR SYSTEM THAT TRANSPORTS THE ARTICLES	WILLIAMS, et al.
WO 01/25754 A1	4/12/01	ARTICLE IRRADIATION SYSTEM IN WHICH ARTICLE TRANSPORTING CONVEYOR IS CLOSELY ENCOMPASSED BY SHIELDING MATERIAL	WILLIAMS, et al.
WO 01/00249 A1	1/4/01	SYSTEM FOR, AND METHOD OF, IRRADIATING ARTICLES TO STERILIZE THE ARTICLES	ALLEN, et al.
4,983,849	1/8/91	APPARATUS AND METHOD FOR PROMOTING UNIFORM DOSAGE OF IONIZING RADIATION IN TARGETS	THOMPSON, et al.

US Serial No. 09/912,576  
Attorney Docket No. SUREB-57333

PATENT

Copies of the prior art references are enclosed.

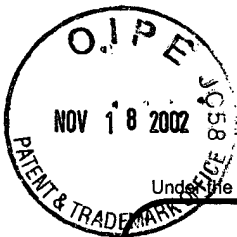
Respectfully submitted,

FULWIDER PATTON LEE & UTECHT, LLP

By: Ellsworth R. Roston  
Ellsworth R. Roston, No. 16,310

ERR:dmc:256464.1  
Enclosures

Howard Hughes Center  
6060 Center Drive, Tenth Floor  
Los Angeles, California 90045  
Telephone: (310) 824-5555  
Facsimile: (310) 824-9696  
Customer No. 24201



RECEIVED

NOV 20 2002

TC 1700

PTO/SB/21 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	09/912,576	
	Filing Date	07/24/2001	
	First Named Inventor	J. Thomas Allen	
	Group Art Unit		
	Examiner Name		
Total Number of Pages in This Submission		Attorney Docket Number	SUREB-57333

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Assignment Papers (for an Application)	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment / Reply	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	Return Postcard
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	Communication to the Patent Office
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Response to Missing Parts/ Incomplete Application	Remarks	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	ELLSWORTH R. ROSTON, ESQ., REG. NO. 16,310
Signature	
Date	11/13/2002

CERTIFICATE OF MAILING			
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: 11-13-2002			
Typed or printed name	ELLSWORTH R. ROSTON, ESQ.		
Signature		Date	11/13/2002

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 02/23545

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61L2/08 A23L3/26 G21K5/08 G21K5/10 H01J37/30

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61L A23L G21K H01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>DATABASE WPI Section Ch, Week 200114 Derwent Publications Ltd., London, GB; Class K08, AN 2001-127961 XP002209102 &amp; JP 2000 312708 A (NKK PLANT KENSETSU KK) , 14 November 2000 (2000-11-14) abstract; figures 4,6</p> <p style="text-align: center;">---</p>	1-52
Y	<p>US 5 396 074 A (PECK RICHARD O ET AL) 7 March 1995 (1995-03-07) cited in the application column 1, line 13 -column 1, line 18 column 4, line 52 -column 6, line 37; figures 1,2</p> <p style="text-align: center;">---</p> <p style="text-align: center;">-/--</p>	1-52

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special-categories of cited documents :

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document but published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\* & \* document member of the same patent family

Date of the actual completion of the international search

27 September 2002

Date of mailing of the international search report

07/10/2002

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Edmueller, P

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 02/23545

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 00 68955 A (TITAN CORP) 16 November 2000 (2000-11-16) page 2, line 28 -page 7, line 4; figures 1,2 ---	1-52
A	WO 99 67793 A (TITAN CORP) 29 December 1999 (1999-12-29) page 2, line 15 -page 5; figures 1,2 ---	1-52
A	WO 01 25754 A (TITAN CORP) 12 April 2001 (2001-04-12) page 6, line 5 -page 17, line 17; figures 1-7 ---	1-52
A	WO 01 00249 A (TITAN CORP) 4 January 2001 (2001-01-04) page 4, line 6 -page 13, line 21; figures 1-4 ---	1-52
A	US 4 983 849 A (THOMPSON CHESTER C ET AL) 8 January 1991 (1991-01-08) column 4, line 29 -column 6, line 23; figures 1-12 -----	1-52

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 02/23545

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 2000312708	A	14-11-2000	NONE	
US 5396074	A	07-03-1995	AT 197857 T	15-12-2000
			AU 674404 B2	19-12-1996
			AU 6412294 A	11-10-1994
			BR 9406016 A	19-12-1995
			CA 2157907 A1	29-09-1994
			DE 69426365 D1	04-01-2001
			DE 69426365 T2	05-04-2001
			EP 0999556 A2	10-05-2000
			EP 1115121 A1	11-07-2001
			EP 0746870 A1	11-12-1996
			ES 2152309 T3	01-02-2001
			JP 8508100 T	27-08-1996
			JP 2001174600 A	29-06-2001
			NZ 263429 A	26-11-1996
			WO 9422162 A1	29-09-1994
			US 5590602 A	07-01-1997
WO 0068955	A	16-11-2000	US 6294791 B1	25-09-2001
			AU 6042299 A	21-11-2000
			EP 1181696 A1	27-02-2002
			WO 0068955 A1	16-11-2000
WO 9967793	A	29-12-1999	US 6127687 A	03-10-2000
			AU 4441399 A	10-01-2000
			CN 1315043 T	26-09-2001
			EP 1090397 A1	11-04-2001
			JP 2002519647 T	02-07-2002
			WO 9967793 A1	29-12-1999
			US 6294791 B1	25-09-2001
			US 6236055 B1	22-05-2001
WO 0125754	A	12-04-2001	US 6285030 B1	04-09-2001
			AU 1366201 A	10-05-2001
			BR 0007205 A	16-10-2001
			EP 1144983 A1	17-10-2001
			WO 0125754 A1	12-04-2001
WO 0100249	A	04-01-2001	AU 5903300 A	31-01-2001
			BR 0012094 A	02-04-2002
			CN 1359304 T	17-07-2002
			EP 1196201 A1	17-04-2002
			WO 0100249 A1	04-01-2001
US 4983849	A	08-01-1991	NONE	

## XP-002209102

AN - 2001-127961 [14]

AP - JP19990124109 19990430

CPY - NIKN

DC - K08 P34 V05 X25

FS - CPI;GMPI;EPI

IC - A61L2/08 ; G21K5/04 ; H01J37/30

MC - K08-X K09-B K09-D

- V05-J05 X25-P01 X25-P02

PA - (NIKN ) NKK PLANT KENSETSU KK

PN - JP2000312708 A 20001114 DW200114 A61L2/08 006pp

PR - JP19990124109 19990430

XA - C2001-037928

XIC - A61L-002/08 ; G21K-005/04 ; H01J-037/30

XP - N2001-094490

AB - JP2000312708 NOVELTY - A dose regulator (10) is arranged between an electron beam source and the substance to be processed so as to regulate irradiation of the electron beam to all points of a substance perpendicular to the direction of the radiated electron beam and to maintain the ratio of absorption of the electron beam passing through the dose regulator and substance and is given by a predetermined formula.

- DETAILED DESCRIPTION - The ratio of absorption by the dose regulator and substance to be processed is given by the following expression  $P1 \times X1 + P2 \times X2$ , where P1 and P2 are respectively the density of material of the dose regulator and substance, and X1 and X2 are the distances traveled by the electron beam through the dose regulator and substance.

- USE - For irradiating electron beams for sterilizing drugs, sanitary goods, or foodstuffs.

- ADVANTAGE - Since the dose regulator is interposed between the electron beam source and substance to be processed and since the ratio of absorption of electron beam by dose regulator and substance is fixed, an electron beam of uniform dose is irradiated to the substance irrespective of the shape of the substance.

- DESCRIPTION OF DRAWING(S) - The figure shows the dose regulator.

- Dose regulator 10

- (Dwg.4/6)

IW - ELECTRON BEAM IRRADIATE APPARATUS FOOD DOSE REGULATE ELECTRON BEAM SOURCE SUBSTANCE PROCESS MAINTAIN ABSORB RATIO BEAM PASS THROUGH SUBSTANCE

IKW - ELECTRON BEAM IRRADIATE APPARATUS FOOD DOSE REGULATE ELECTRON BEAM SOURCE SUBSTANCE PROCESS MAINTAIN ABSORB RATIO BEAM PASS THROUGH SUBSTANCE

NC - 001

OPD - 1999-04-30

ORD - 2000-11-14

PAW - (NIKN ) NKK PLANT KENSETSU KK

TI - Electron beam irradiation apparatus for sterilizing foodstuffs, has dose regulator between electron beam source and substance to be processed to maintain absorption ratio of beam passing through it and substance